

# METHOD AND SYSTEM OF REQUESTING ENGINE ON/OFF STATE IN HYBRID ELEC- TRIC VEHICLE

## Abstract

A method and system of engine start/stop control for a HEV that monitors the battery and requests a specific engine state based on condition of the battery. A battery parameter such as discharge power limit (DPL) or state of charge (SOC) is compared with a set of threshold levels including a MIN level, an ON level, and an OFF level and the result of the comparison provides inputs to a state machine. The state machine includes an ON state, an OFF state and a OPPORTUNISTIC state. The machine transitions between the various states as a function of DPL and SOC relative to the sets of threshold levels.